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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/821,285

**Applicant(s)**

NATARAJAN ET AL.

**Examiner**

ROBERT W. WILSON

**Art Unit**

2419

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 September 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-44 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-44 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)  
3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 17–20, 23–25, 27–34, 37–38, & 42–44 are rejected under 35 U.S.C. 102(E) as being anticipated by Lin (U.S. Patent No.: 6,405,250).

Referring to claim 17, Lin teaches: A method for providing dynamic feedback control of network elements in a network including a plurality of network elements each of said network element having a plurality of operating parameters associated with therewith, the data network further comprising a first network portion, the first network portion being administered by a first network service provider, the first network portion including a first plurality of network elements the method comprising (Figures 1 and 4 perform the method) , the method comprising:

Dynamically receiving information related to a first subset of network elements ( Communicator per Fig 4 receives information related to 101-104 or first subset of NEs per Fig 1)

Dynamically analyzing at least a portion of said received information based upon selected guidelines to determined whether a perform of a least a portion of said network conforms with a predetermined criteria (Trend Analyzer per Fig 4 analyzes information received from the NEs per Fig 1 based upon guidelines to determine whether parameters have exceed thresholds)

Automatically and dynamically reporting results of said analysis to the administration system for dynamically responding to said results when the perform of the portion of said network fails to conform with a predetermined criteria (Trend Analyzer per Fig 4 reports to Behavior Transition Models of NE's & Network or administration system when a threshold has been exceed by NEs per Fig 1)

Wherein the response is selected to dynamically alter a performance policy of the portion of the network to conform with a predetermined criteria (Action Choose per Fig 4 dynamically selects a performance policy to conform with a predetermined criteria per col. 5 line 55 to col. 7 line 6)

Where the reporting is dynamically trigger by the performance of the portion of said network failing to conform with the predetermined criteria (NEs per col. 5 line 55 to col. 7 line 6)

Dynamically generating updated element control parameters used to affect at least one aspect of network performance (dynamically determining reconfiguration parameter for NE per col. 7 lines 48 to col. 8 line 3)

Providing at least a portion of said updated element control parameters to said at least one network element (NE is dynamically reconfigured per col. 7 lines 48 to col. 8 line 3)

Automatically and dynamically adjusting at least one associated operating parameter at the at least one network element in response to receiving said updated control parameter (Action Enforcer receives and reconfigures per col. 7 lines 48 to col. 8 line 3)

In addition Lin teaches:

Regarding claim 18, wherein the predetermined criteria relates to specified bandwidth use (Network congestion or bandwidth per col. 9 lines 25 to 35)

Regarding claim 19, wherein said received information includes operating parameter information related to a subset of network elements (Communicator (404) per Fig 4 receives operating parameters related to NEs per Fig 4) and where said analyzing means (Trend Analyzer per Fig 4) includes means for analyzing at least a portion of said operating parameter information to determine whether a service quality of a portion of said network conform with acceptable service level (Trend Analyzer has means to analyze a parameters which are associated with NEs to determine conformance with service level)

Regarding claim 20, further including modifying a configuration of said at least one network element in response to determination that said service quality of said network portion does not meet a specified service level requirement wherein the modification is selected so that at least one network element is caused to meet the specified service level requirement (Action Enforcer modifies a NE upon receipt of message from Action Chooser per Fig 4)

Regarding claim 23 wherein said analyzing includes analyzing said information to evaluate a fault management performance of a portion of said network (Trend analyzer per Fig 4 evaluates overload situation or fault associated with NEs per col. 7 line 11)

Regarding claim 24, further including receiving an event notification message relating to an error reported by a specific network element (Communicator (404) per Fig 4 or first event handling component receives SNMP message relating to errors associated with 101 to 104 per Fig 1)

Regarding claim 25, wherein said specific network element corresponds to a network element administered by said first service provider (101 is a specific NE which corresponds to NMS associated with first service provider) wherein the method further comprises receiving specific network element an event notification message relating to an adjustment of at least one

Art Unit: 2419

operating parameter associated with a specific network (Communicator in NE per Fig 4 receives a reconfiguration message per col. 7 lines 45 to 50)

Regarding claim 27 further including reporting said system error to a system administrator of the first network portion (NMS has an inherent system administrator associated with 120 and 101 to 104 per Fig 1)

Regarding claim 28, wherein the network further including a policy engine (Trend Analyzer per Fig 4) having at least one policy for analyzing information from further including modifying a configuration (Action Chooser per Fig 4) of said at least one network element (101 per Fig 1) in response to determination that said service quality of said network portion does not meet at least one aspect of network performance

The method further comprising dynamically modifying said policy in response to a determination that said policy is not effective in affecting said aspect of network performance to conform with said predetermined performance criteria (Action Enforcer modifies a NE upon receipt of message from Action Chooser per Fig 4)

Regarding claim 29, further including reporting a non-effective policy evaluation to the system administrator of the first network portion (NMS reports non-effective policy to inherent system administrator)

Regarding claim 30, further including receiving instructions from said system administrator for modifying said reported policy and dynamically modifying said policy in accordance with said instructions (Action Enforcer receives instructions and modifies per Fig 4)

Referring to claim 31, Lin teaches: a system for providing dynamic feedback control of network elements in a data network, the data network including a plurality of network elements each of the said network elements having a plurality of operating parameters associated therewith the data network further comprising a first network portion the first network portion being administered by a first network service provider, the first network portion including a first plurality of network elements (Figures 1 and 4 are the system), the system comprising:

Means for dynamically receiving information related to a first subset of network elements (Communicator or means per Fig 4 receives information related to 101-104 or first subset of NEs per Fig 1)

Means for dynamically analyzing at least a portion of said received information based upon selected guidelines to determine whether a perform of a least a portion of said network conforms with a predetermined criteria (Trend Analyzer or means per Fig 4 analyzes information received from the NEs per Fig 1 based upon guidelines to determine whether parameters have exceed thresholds)

Means for automatically and dynamically reporting results of said analysis to the administration system for dynamically responding to said results when the perform of the portion of said network fails to conform with a predetermined criteria (Trend Analyzer or means per Fig 4 reports to Behavior Transition Models of NE's & Network or administration system when a threshold has been exceed by NEs per Fig 1)

Wherein the response is selected to dynamically alter a performance policy of the portion of the network to conform with a predetermined criteria (Action Choose per Fig 4 dynamically selects a performance policy to conform with a predetermined criteria per col. 5 line 55 to col. 7 line 6)

Where the reporting is dynamically trigger by the performance of the portion of said network failing to conform with the predetermined criteria (NEs per col. 5 line 55 to col. 7 line 6)

Means for dynamically generating updated element control parameters used to affect at least one aspect of network performance (Action Chooser or means dynamically determining reconfiguration parameter for NE per col. 7 lines 48 t0 col. 8 line 3)

Means for Providing at least a portion of said updated element control parameters to said at least one network element (Communicator (404) per Fig 4 or means for providing updated control parameter to NE which is dynamically reconfigured per col. 7 lines 48 t0 col. 8 line 3)

Means for automatically and dynamically adjusting at least one associated operating parameter at the at least one network element in response to receiving said updated control parameter (Action Enforcer or means automatically and dynamically reconfigures per col. 7 lines 48 t0 col. 8 line 3)

In addition Lin teaches:

Regarding claim 32, wherein the predetermined criteria relates to specified bandwidth use (Network congestion or bandwidth per col. 9 lines 25 to 35)

Regarding claim 33, wherein said received information includes operating parameter information related to a subset of network elements (Communicator (404) per Fig 4 receives operating parameters related to NEs per Fig 4) and where said analyzing means (Trend Analyzer per Fig 4) includes means for analyzing at least a portion of said operating parameter information to determine whether a service quality of a portion of said network conform with acceptable service level (Trend Analyzer has means to analyze a parameters which are associated with NEs to determine conformance with service level)

Regarding claim 34 further including means for modifying a configuration of said at least one network element in response to determination that said service quality of said network portion does not meet a specified service level requirement wherein the modification is selected so that at least one network element is caused to meet the specified service level requirement (Action Enforce or means for modifying a NE upon receipt of message from Action Chooser per Fig 4)

Regarding claim 37 wherein said analyzing means includes means for analyzing said information to evaluation fault management performance of a portion of said network (Trend analyzer per Fig 4 overload situation or fault per col. 7 line 11)

Regarding claim 38, further including means for receiving an event notification message relating to an error reported by a specific network element of said plurality of network elements of said first plurality of network elements (Communicator (404) per Fig 4) or means receives SNMP message relating to errors associated with 101 to 104 per Fig 1)

Regarding claim 42, wherein the network further including a policy means having at least one policy for analyzing information from selected network elements (Behavior Transition Models of NE's & Network per Fig 4 or means for analyzing NEs per Fig 4) and dynamically generating updated element control parameter used to affect at least one aspect of network performance (Behavior Transition Models of NE's & Network per Fig 4 or means for analyzing NEs and Action chooser updates Fig 4) the system further comprising means for dynamically modifying said policy in response to a determination that said policy is not effective in affecting said aspect or network performance to conform with said predetermined performance criteria (Behavior Transition Model per Fig 4)

Regarding claim 43, further including means for reporting noneffective policy evaluation to the system administrator of the first network portion (NMS provides input to inherent administrator associated when NEs have status per Fig 20)

Regarding claim 44, further including means for receiving instructions from system administrator for modifying reporting policy and means for dynamically modifying said policy in accordance with said instructions Each NE has a Communicator per Fig 4 or means for receiving message or instructions from NMS for modifying frequency of reporting and also is configured per message or dynamically modifying policy)

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6, 9-11, 13-16, & 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No.: 6,405,250) in view of Subramanian (U.S. Patent No.: 5,519,707).

Art Unit: 2419

Referring to claim 1, Lin teaches: A system for providing dynamic feedback control of network elements in a data network (Figures 1 and 4 are the system), the system comprising:

A plurality of network elements (NEs per Figs 1 and 4 and per col. 2 line 52 to col. 3 line 55), each of the network elements having a plurality of operating parameters (parameters per col. 3 lines 26 to 55) associated therewith

A first network portion, the first network portion (101-104 and 120 per Fig 1)

A first network portion (101-104 and 120 per Fig 1) including a first plurality of network elements (101-104 per Fig 1)

A data store system operable to dynamically receive information related to a first subset of network elements (Communicator (404) per Fig 4 receives information related to 101-104 per Fig 1) said first subset of network elements including at least one network element of the first plurality of network elements (101 to 104 per Fig 1)

A policy engine system operable to dynamically analyze at least a portion of said received information based upon selected guideline to determine whether a perform of at least a portion of said network conforms with a predetermined criteria (Trend Analyzer per Fig 4 analyzes information received based upon guidelines to determine whether parameters have exceed thresholds)

Said policy engine system being further operable to automatically and dynamically report results of said analysis to an administration system for dynamically responding to said results when the performs of the portion of said network fails to conform with the predetermined criteria (Trend Analyzer per Fig 4 or policy engine automatically reports results to Behavior Transition models of NE's and Network per Fig 4 when thresholds relative to performance have been exceeded)

Wherein the response is selected to dynamically alter a performance policy of the portion of the network to conform with a predetermined criteria (Action Choose per Fig 4 dynamically selects a performance policy to conform with a predetermined criteria per col. 5 line 55 to col. 7 line 6)

Where the reporting is dynamically trigger by the performance of the portion of said network failing to conform with the predetermined criteria (NEs per col. 5 line 55 to col. 7 line 6)

Lin does not expressly call for: network portion being administered by a first network provider

Subramanian teaches: network portion being administered by a first network provider (Networks can be managed utilizing multiple service providers or supervisor per col. 14 lines 32 to 50)

It would have been obvious to add network portion being administered by a first network provider of Subramanian in place of the NMS of Lin in order manage a network by having a different supervisor for each service.

In addition Lin teaches:

Regarding claim 2, wherein the predetermined criteria relates to specified bandwidth use (Network congestion or bandwidth per col. 9 lines 25 to 35)

Regarding claim 3, wherein the first portion of network elements includes a plurality of telecommunication switches administered by said first network service provider (NEs are routers or switches per col. 3 line 1 managed by NMS associated with first service provider)

Regarding claim 4, wherein said received information includes operating parameter information related to a subset of network elements (Communicator (404) per Fig 4 receives operating parameters related to NEs per Fig 4) and where said analyzing means (Trend Analyzer per Fig 4) includes means for analyzing at least a portion of said operating parameter information to determine whether a service quality of a portion of said network conform with acceptable service level (Trend Analyzer has means to analyze a parameters which are associated with NEs to determine conformance with service level)

Regarding claim 5 further including modifying a configuration of said at least one network element in response to determination that said service quality of said network portion does not meet a specified service level requirement wherein the modification is selected so that at least one network element is caused to meet the specified service level requirement (Action Enforce modifies a NE upon receipt of message from Action Chooser per Fig 4)

Regarding claim 6, wherein said at least one network element includes at least one network elements of the first plurality of network elements (101 to 104 per Fig 1 includes one NE)

Regarding claim 9 wherein the policy engine system is further operable to analyze said information to evaluate a fault management performance of a portion of said network (Trend analyzer per Fig 4 overload situation or fault per col. 7 line 11)

Regarding claim 10, wherein the policy engine system includes a first event handling component operable to receive an event notification message relating to an error reported by a specific network element (Communicator (404) per Fig 4 or first event handling component receives SNMP message relating to errors associated with 101 to 104 per Fig 1)

Regarding claim 11, wherein said specific network element corresponds to a network element administered by said first service provider (101 is a specific NE which corresponds to NMS associated with first service provider) wherein the specific network element includes a second event handling component operable to receive an event notification message relating to an adjustment of at least one operating parameter associated with the specific network element (Communicator per Fig 4 or second event handling component receives SNMP message relating to errors associated with 101 to 104 per Fig 1 )

Regarding claim 13, wherein the policy engine is operable to include at least one policy for analyzing information from said first subset of network elements and dynamically generate updated element control parameters used to affect at least one aspect of network performance (Trend analyzer per Fig 4 analyzes SNMP from NEs and Action Chooser generates control parameters per Fig 4)

Regarding claim 14, wherein said at least one network element of the first plurality of network elements is operable to receive at least a portion of said updated element control parameters (Each NE has a Communicator per Fig 4 to receive updated parameters)

Regarding claim 15, wherein said at least one network element is further operable to automatically and dynamically adjust at least one associated operating parameter in response to receiving at least a portion of said updated element control parameters (Action Enforcer in each NE automatically receives and adjusts parameters per Fig 4)

Regarding claim 16, wherein the administration system is operable to dynamically modify said policy in response to a determination that said policy is not effective in affecting said aspect of network performance to conform with said predefined performance criteria (Behavior Transition Models of NE's & Network per Fig 4)

Regarding claim 43, further including means for reporting noneffective policy evaluation to the system administrator of the first network portion (NMS provides input to inherent administrator associated when NEs have status per Fig 20)

Referring to claim 39 Lin teaches: the system of claim 38 and wherein said specific network element (101 to 104 per Fig 1) correspond to a specified network element (101 to 104 per Fig 4) and wherein the system further comprises means for receiving at the specific network element an event notification message relating to an adjust of at least one operating parameter associated with the specific network element (Communicator or means per Fig 4 receives)

Lin does not expressly call for: network element administered by a first service provider.

Subramanian teaches: network element administered by a first service provider (Networks which have elements can be managed utilizing multiple service providers or supervisor per col. 14 lines 32 to 50)

It would have been obvious to add network element administered by a first service provider of Subramanian in place of the NMS of Lin in order manage a network by having a different supervisor for each service.

5. Claims 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No.: 6,405,250) in view of Subramanian (U.S. Patent No.: 5,519,707) further in view of Winokur (U.S. Patent No.: 5,483,637)

Referring to claim 12, the combination of Lin and Subramanin teach: the system of claim 10 and analysis error messages associated with network elements

Lin does not expressly call for: suspending analysis in response to reception of an error notification message.

Winokur teaches: suspending analysis in response to reception of an error notification message (col. 6 lines 55 to col. 7 line 5)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add suspending analysis in response to reception of an error notification message of Winokur to the system of Lin and Subramanin in order to build a system which reevaluates the status of the system based upon error messages in order to improve the system performance.

6. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No.: 6,405,250) in view of Winokur (U.S. Patent No.: 5,483,637)

Referring to claim 26, Lin teaches: the the method of claim 24 and analysis error messages associated with network elements

Lin does not expressly call for: suspending analysis in response to reception of an error notification message.

Winokur teaches: suspending analysis in response to reception of an error notification message (col. 6 lines 55 to col. 7 line 5)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add suspending analysis in response to reception of an error notification message of Winokur to the system of Lin in order to build a system which reevaluates the status of the system based upon error messages in order to improve the system performance.

7. Claims 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No.: 6,405,250) in view of Winokur (U.S. Patent No.: 5,483,637)

Referring to claim 40, Lin teaches: the system of claim 38 and analysis error messages associated with network elements

Lin does not expressly call for: means for suspending analysis in response to reception of an error notification message.

Art Unit: 2419

Winokur teaches: means for suspending analysis in response to reception of an error notification message (col. 6 lines 55 to col. 7 line 5)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add means for suspending analysis in response to reception of an error notification message of Winokur to the system of Lin in order to build a system which reevaluates the status of the system based upon error messages in order to improve the system performance.

In addition Lin teaches:

Regarding claim 41, further including means for reporting said error to a system administrator of the first network portion (Each NE has a Communicator which has means for reporting errors to NMS which has an inherent system administrator per Figs 1 & 4)

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No.: 6,405,250) in view of Subramanian (U.S. Patent No.: 5,519,707) further in view of Azarni (U.S. Patent No.: 5,905,715)

Referring to claim 7, the combination of Lin and Subramanian teach: the system of claim 1 and a portion of said network

The combination of Lin and Subramanian do not expressly call for: operable to analyze said information to determine billing information

Azarni teaches: configured or designed to analyze said information to determine billing information (billing analysis as well as NMS per col. 1 lines 35 to 49 or Fig 20)

It would have been obvious to add configured or designed to analyze said information to determining billing information of Azarni to the network management of Lin and Suramanin in order to build a system which can provide billing on different services.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No.: 6,405,250) in view of Subramanian (U.S. Patent No.: 5,519,707) further in view of Ross (GB2318479) (which is an IDS document of record)

Referring to claim 8, the combination of Lin and Subramanian teach: the system of claim 1 and policy engine

Art Unit: 2419

The combination of Lin and Subramanian do not expressly call for: operable to analyze and detect security violations

Ross teaches: configured or designed to analyze and detect security violations (Mgt units or management agents can be utilized to control network security per Pgs 59 to 60 Para 5.2)

It would have been obvious to add configured or designed to analyze and detect security violations of Ross to the network agents of Lin and Suramanin in order to build a system which provide network security.

10. Claims 21 & 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No.: 6,405,250) in view of Azarni (U.S. Patent No.: 5,905,715)

Referring to claim 21, Lin teaches: the method of claim 17

Lin does not expressly call for: analyze said information to determine billing information

Azarni teaches: analyze said information to determine billing information (billing analysis as well as NMS per col. 1 lines 35 to 49 or Fig 20)

It would have been obvious to add configured or designed to analyze said information to determining billing information of Azarni to the network management of Lin in order to build a system which can provide billing on different services.

Referring to claim 35, Lin teaches: system of claim 31

Lin does not expressly call for: analyzing means includes means for analyzing said information to determine billing information

Azarni teaches: analyzing means includes means for analyzing said information to determine billing information billing analysis as well as NMS per col. 1 lines 35 to 49 or Fig 20)

It would have been obvious to add to analyze said information to means for analyzing billing information of Azarni to the network management of Lin in order to build a system which can provide billing on different services.

11. Claims 22 & 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No.: 6,405,250) in view of Ross (GB2318479) (which is an IDS document of record)

Referring to claim 22, Lin teaches: the method of claim 26 and a portion of said network

Lin does not expressly call for: to analyze and detect security violations

Ross teaches: to analyze and detect security violations (Mgt units or management agents can be utilized to control network security per Pgs 59 to 60 Para 5.2)

It would have been obvious to add to analyze and detect security violations of Ross to the network agents of Lin in order to build a system which provide network security.

Referring to claim 36, Lin teaches: system of claim 31

Lin does not expressly call for: analyzing means includes means for analyzing said information to detect security violations

Ross teaches: analyzing means includes means for analyzing said information to detect security violations per Pgs 59 to 60 Para 5.2)

It would have been obvious to add means includes means for analyzing said information to detect security violations of Ross to the network agents of Lin in order to build a system which provide network security.

### ***Double Patenting***

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 17-44 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 & 11-13 of U.S. Patent No. 6,765,864.

Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Referring to claims 17 & 18 of the instant application, claim 1 of U.S. Patent 6,765,864 teaches all of the limitations.

In addition:

Regarding claim 19 of the instant application, claim 2 of U.S. Patent 6,765,864 teaches all of the limitations.

Regarding claim 20 of the instant application, claim 3 of U.S. Patent 6,765,864 teaches all of the limitations.

Regarding claim 21 of the instant application, claim 4 of U.S. Patent 6,765,864 teaches all of the limitations.

Regarding claim 22 of the instant application, claim 5 of U.S. Patent 6,765,864 teaches all of the limitations.

Regarding claim 23 of the instant application, claim 6 of U.S. Patent 6,765,864 teaches all of the limitations.

Regarding claim 24 of the instant application, claim 7 of U.S. Patent 6,765,864 teaches all of the limitations.

Regarding claim 26 of the instant application, claim 8 of U.S. Patent 6,765,864 teaches all of the limitations.

Regarding claim 27 of the instant application, claim 9 of U.S. Patent 6,765,864 teaches all of the limitations.

Regarding claim 28 of the instant application, claim 11 of U.S. Patent 6,765,864 teaches all of the limitations.

Regarding claim 29 of the instant application, claim 12 of U.S. Patent 6,765,864 teaches all of the limitations.

Regarding claim 30 of the instant application, claim 13 of U.S. Patent 6,765,864 teaches all of the limitations.

Referring to claims 31-32 of the instant application, claim 1 of U.S. Patent 6,765,864 teaches all of the limitations as being performed as a method. Claim 1 of U.S. Patent 6,765,864 does not teach means. It would have been obvious to one of ordinary skill in the art at the time of the invention perform with a means or apparatus because a method requires an apparatus in order to be performed.

Art Unit: 2419

In addition:

Regarding claim 33 of the instant application, claim 2 of U.S. Patent 6,765,864 teaches all of the limitations.

Regarding claim 34 of the instant application, claim 3 of U.S. Patent 6,765,864 teaches all of the limitations.

Regarding claim 35 of the instant application, claim 4 of U.S. Patent 6,765,864 teaches all of the limitations.

Regarding claim 36 of the instant application, claim 5 of U.S. Patent 6,765,864 teaches all of the limitations.

Regarding claim 37 of the instant application, claim 6 of U.S. Patent 6,765,864 teaches all of the limitations.

### ***Response to Amendment***

14. Applicant's arguments filed 9/2/08 have been fully considered but they are not persuasive.

The examiner respectfully disagrees with the applicant argument "wherein the reporting is dynamically triggered by the performance of the portion of said network failing to conform with the predetermined criteria

Lin teaches: wherein the reporting is dynamically triggered by the performance of the portion of said network failing to conform with the predetermined criteria (The NMS dynamically updates the policy for reporting status based upon performance. The NE can raise an alarm any time when certain particular measurement data changes or predetermined criteria per col. 5 lines 55 to col. 6 line 33)

The applicant repeatedly argues that no explicit analysis of why the disclosure should be combined with per the KSR decision has been provided. The outcome of the KSR decision was not which analysis to use but whether the rejection was clearly articulated or in other words whether the rejection was clearly explained.

The examiner respectfully disagrees with the applicant's representative argument that examiner's motivation to combine is a mere conclusory statement and not sufficient to support an obvious rejection under KSR. The examiner asserts that he has clearly articulated the reason of why combining the reference read on the claimed invention would have been obvious. The analysis supporting a rejection under 35 U.S.C 103 for this particular case is as follows:

The examiner respectfully disagrees with the applicant argument that the combination of references fail to teach: being administered by first network provider

Lin teaches: A system for providing dynamic feedback control of network elements in a data network (Figures 1 and 4 are the system), the system comprising:

Art Unit: 2419

A plurality of network elements (NEs per Figs 1 and 4 and per col. 2 line 52 to col. 3 line 55), each of the network elements having a plurality of operating parameters (parameters per col. 3 lines 26 to 55) associated therewith. A first network portion, the first network portion (101-104 and 120 per Fig 1). A first network portion (101-104 and 120 per Fig 1) including a first plurality of network elements (101-104 per Fig 1). A data store system configured or designed to dynamically receive information related to a first subset of network elements (Communicator (404) per Fig 4 receives information related to 101-104 per Fig 1) said first subset of network elements including at least one network element of the first plurality of network elements (101 to 104 per Fig 1). A policy engine system configured or designed to dynamically analyze at least a portion of said received information based upon selected guideline to determine whether a perform of at least a portion of said network conforms with a predetermined criteria (Trend Analyzer per Fig 4 analyzes information received based upon guidelines to determine whether parameters have exceed thresholds). Said policy engine system being further configured or designed to automatically and dynamically report results of said analysis to an administration system for dynamically responding to said results when the performs of the portion of said network fails to conform with the predetermined criteria (Trend Analyzer per Fig 4 or policy engine automatically reports results to Behavior Transition models of NE's and Network per Fig 4 when thresholds relative to performance have been exceeded), Wherein the response is selected to dynamically alter a performance policy of the portion of the network to conform with a predetermined criteria (Action Choose per Fig 4 dynamically selects a performance policy to conform with a predetermined criteria per col. 5 line 55 to col. 7 line 6), Where the reporting is dynamically trigger by the performance of the portion of said network failing to conform with the predetermined criteria (NEs per col. 5 line 55 to col. 7 line 6)

Lin does not expressly call for: network portion being administered by a first network provider

Subramanian teaches: network portion being administered by a first network provider (Networks can be managed utilizing multiple service providers or supervisor per col. 14 lines 32 to 50)

It would have been obvious to add network portion being administered by a first network provider of Subramanian in place of the NMS of Lin in order manage a network by having a different supervisor for each service.

The secondary reference Suramanin teaches network can be administered by multiple service providers per col. 14 lines 32 to 50. One of ordinary skill in the art would know that if multiple providers are used to manage a network then multiple supervisory functions would be used to manage the network; consequently, the examiner asserts that a clear articulation of the reasons why the claimed invention would have been obvious so applicant's argument is unpersuasive.

The applicant also argues that there must be a suggestion in the reference in order to combine the references. The examiner points out that there are at least 7 analysis which can be used under KSR. The analysis which are sufficient under the KSR decision are as follows:

1. Combining prior art elements know to yield predictable results.

2. Simple substitution of one known element for another to obtain predictable results.
3. Use of known technique to improve similar devices (method or products) in the same way.
4. Applying a known technique to a known device (method or product) ready for improvement
5. "Obvious to try" Choosing from a finite number of identified predictable solution with a reasonable expectation of success.
6. Known work in one field of endeavor may prompt variation of it for used in either the same field or a different one based on design incentive or other market forces if the variation are predictable to one of ordinary skill in the art.
7. Some teaching suggestion or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference.

Applicant's argument implies that analysis number 7 would be required as a result of the KSR decision because a suggestion to combine is required. This is not the case because any of the 7 analyses are sufficient; thus, applicant argument motivation to combine was not in conformance with the KSR decision is not persuasive.

The examiner respectfully disagrees with the applicant argument Lin does not teach: dynamically analyzing at least a portion of said received information based upon selected guidelines to determine whether a perform of at least a portion of said network conforms with predetermined criteria relating to a specified bandwidth use

Lin teaches: dynamically analyzing at least a portion of said received information based upon selected guidelines to determine whether a perform of at least a portion of said network conforms with predetermined criteria relating to a specified bandwidth use ( A determination is made as to criteria showing the network state. The NMS dynamically updates the policy for reporting status based upon performance. The NE can raise an alarm any time when certain particular measurement data changes or predetermined criteria per col. 5 lines 55 to col. 6 line 33) The Network congestion or bandwidth per col. 9 lines 25 to 35. The examiner has interpreted that bandwidth or congestion is being monitored.)

The examiner respectfully disagrees with the applicant argument that Lin does not teach: wherein said received information includes operating parameter information related to a subset of network elements and where said analyzing means includes means for analyzing at least a portion of said operating parameter information to determine whether a service quality of a portion of said network conform with acceptable service level

Lin teaches: wherein said received information includes operating parameter information related to a subset of network elements (Communicator (404) per Fig 4 receives operating parameters related to NEs per Fig 4) and where said analyzing means (Trend Analyzer per Fig 4) includes means for analyzing at least a portion of said operating parameter information to determine whether a service quality of a portion of said network conform with acceptable service level (Trend Analyzer has means to analyze a parameters which are associated with NEs to determine conformance with service level) ; thus, applicant argument that Lin fails to teach: dynamically

analyzing at least a portion of said operating parameter information to determine whether a service quality of a portion of said network conforms with acceptable service level parameters.

The examiner respectfully disagrees with the applicant argument that the reference Lin fails to teach: including modifying a configuration of said at least one network element in response to determination that said service quality of said network portion does not meet a specified service level requirement wherein the modification is selected so that at least one network element is caused to meet the specified service level requirement

Lin teaches: further including modifying a configuration of said at least one network element in response to determination that said service quality of said network portion does not meet a specified service level requirement wherein the modification is selected so that at least one network element is caused to meet the specified service level requirement (Action Enforce modifies a NE upon receipt of message from Action Chooser per Fig 4)

The examiner respectfully disagrees with the applicant argument: wherein the policy engine system is further configured or designed to analyze said information to evaluate a fault management performance of a portion of said network

Lin teaches: wherein the policy engine system is further operable to analyze said information to evaluate a fault management performance of a portion of said network (Trend analyzer per Fig 4 overload situation or fault per col. 7 line 11)

The examiner points out there is no limitation in claim 9 for dynamically analyzing at least a portion of network operating parameter information and therefore the reference does not need to show limitations which are not a part of the claimed invention.

The examiner respectfully disagrees with the applicant argument that the reference Lin does not expressly call for: wherein said analyzing includes analyzing said information to evaluate a fault management performance of a portion of said network

Lin teaches: wherein said analyzing includes analyzing said information to evaluate a fault management performance of a portion of said network (Trend analyzer per Fig 4 evaluates overload situation or fault associated with NEs per col. 7 line 11)

The examiner respectfully disagrees with the applicant argument that the reference Lin does not expressly call for: further including receiving an event notification message relating to an error reported by a specific network element

Lin teaches: further including receiving an event notification message relating to an error reported by a specific network element (Communicator (404) per Fig 4 or first event handling component receives SNMP message relating to errors associated with 101 to 104 per Fig 1)

The examiner respectfully disagrees with the applicant's argument that Lin does not teach:

Art Unit: 2419

further including reporting said system error to a system administrator of the first network portion

Lin teaches: further including reporting said system error to a system administrator of the first network portion (NMS has an inherent system administrator associated with 120 and 101 to 104 per Fig 1)

The examiner points out there is no limitation in claim 24 or claim 37 for dynamically analyzing the reported throughput data and/or blocking rate data to evaluate a fault management performance of a portion of the network and therefore the reference does not need to show limitations which are not a part of the claimed invention.

The examiner respectfully disagrees with the applicant's argument that the Lin does not expressly call for: notification message relating to error reported to NEs

Lin teaches, wherein the policy engine system includes a first event handling component configured or designed to receive an event notification message relating to an error reported by a specific network element (Communicator (404) per Fig 4 or first event handling component receives SNMP message relating to errors associated with 101 to 104 per Fig 1)

The examiner respectfully disagrees with the applicant argument that Lin does not teach: wherein the administration system is operable to dynamically modify said policy in response to a determination that said policy is not effective in affecting said aspect of network performance to conform with said predefined performance criteria

Lin teaches: wherein the administration system is operable to dynamically modify said policy in response to a determination that said policy is not effective in affecting said aspect of network performance to conform with said predefined performance criteria (Behavior Transition Models of NE's & Network per Fig 4 )

The examiner points out that there is no claim limitation of "dynamically modifying the behavior transition modes in response to a determination that the behavior transmission models are not effective in causing a desired aspect of network performance to conform with predefined performance criteria.

The examiner respectfully disagrees with the applicant argument that the combination of references do not teach:: suspending analysis in response to reception of an error notification message.

The combination of Lin and Subramanin teach: the system of claim 10 and analysis error messages associated with network elements

Lin does not expressly call for: suspending analysis in response to reception of an error notification message.

Winokur teaches: suspending analysis in response to reception of an error notification message (col. 6 lines 55 to col. 7 line 5)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add suspending analysis in response to reception of an error notification message of Winokur to the system of Lin and Subramanin in order to build a system which reevaluates the status of the system based upon error messages in order to improve the system performance.

The examiner respectfully disagrees with the applicant argument that the motivation to combine the references in order to reject claim 12 does not meet obviousness in view of KSR. The same argument explained above applies. The examiner asserts that the he has clearly articulated the reason of why combining the reference read on the claimed invention would have been obvious and therefore the rejection meets the KSR criteria.

The examiner respectfully disagrees with the applicant's argument that the combination of reference do not expressly call for: configured or designed to analyze said information to determine billing information

The combination of Lin and Subramanian teach: the system of claim 1 and a portion of said network

The combination of Lin and Subramanian do not expressly call for: configured or designed to analyze said information to determine billing information

Azarni teaches: configured or designed to analyze said information to determine billing information (billing analysis as well as NMS per col. 1 lines 35 to 49 or Fig 20)

It would have been obvious to add configured or designed to analyze said information to determining billing information of Azarni to the network management of Lin and Suramanin in order to build a system which can provide billing on different services.

The examiner respectfully disagrees with the applicant argument that the motivation to combine the references in order to reject claim 7 does not meet obviousness in view of KSR. The same argument explained above applies. The examiner asserts that the he has clearly articulated the reason of why combining the reference read on the claimed invention would have been obvious and therefore the rejection meets the KSR criteria.

The examiner respectfully disagrees with the applicant argument that the combination of references do not expressly call for: the limitations of claim 8.

Referring to claim 8, the combination of Lin and Subramanian teach: the system of claim 1 and policy engine

The combination of Lin and Subramanian do not expressly call for: configured or designed to analyze and detect security violations

Ross teaches: configured or designed to analyze and detect security violations (Mgt units or management agents can be utilized to control network security per Pgs 59 to 60 Para 5.2)

It would have been obvious to add configured or designed to analyze and detect security violations of Ross to the network agents of Lin and Suramanin in order to build a system which provide network security.

The examiner respectfully disagrees with the applicant's argument relative to obvious double patenting rejection that it is too premature to submit a terminal disclaimer. The MPEP requires examiners to enter an obvious double patenting rejection into the record in order to provide applicant with compact prosecution. The examiner respectfully points out that as long as a double patenting rejection is appropriate the examiner will never indicate that there is allowable subject matter until after a terminal disclaimer has been filed. Applicant has failed to provide any evidence which overcomes the obvious double patenting rejection;; consequently, the obvious double patenting rejection is still appropriate and will be maintained.

#### ***Conclusion***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT W. WILSON whose telephone number is (571)272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571/272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert W Wilson/  
Primary Examiner, Art Unit 2419

RWW